European Journal of Economic and Financial Research
ISSN: 2501-9430
ISSN-L: 2501-9430
Available on-line at: http://www.oapub.org/soc

DOI: 10.46827/ejefr.v7i2.1506 Volume 7 │ Issue 2 │ 2023

INFLUENCE OF ACCOUNTING INFORMATION SYSTEM ON FINANCIAL PERFORMANCE OF TEA MANUFACTURING COMPANIES IN KENYA - CASE OF MUDETE TEA FACTORY

Patrick Malongo Lidovolo[1],
Atieno Margaret[2i]
[1]PhD Student,
Kaimosi Friends University,
Kenya
[2]Dr. Department of Accounting & Finance,
Kaimosi Friend University,
Kenya

Abstract:
The main objective of this study was to evaluate the influence of the accounting information system on the financial performance of tea manufacturing firms in Kenya, a case study of Mudete Tea Factory. The specific objectives were; to examine the influence of accounting information recording on financial performance, and to determine the influence of financial reporting on the financial performance of tea manufacturing firms in Kenya. The study was carried out in Mudete Tea Factory. The study was guided by a technology acceptance model. The study used a case study research design. The study employed a census sampling technique where all the target population was used in the study. Primary data was collected by the use of questionnaires, while secondary data from the firm's audited financial statements for previous financial years. The reliability of the research instruments was tested through Cronbach's Alpha. Validity was tested through expert analysis of the questionnaires. The data was analyzed through inferential statistics. Inferential statistics were represented through regression analysis and correlation analysis to determine the quality of the relationship between the dependent and independent variables. The findings of the study were presented using tables. The study showed that there exists a positive and significant relationship between the components of AIS and firm's financial performance with an average R2 of 0.508. The study results also indicated that accounting information recording and financial reporting have a positive and significant effect on the financial performance of tea factories in Kenya. The research recommended that tea manufacturing firms should ensure they use accounting information systems in their daily activities which results in improved financial performance.

[i] Correspondence: email lidovolophd@gmail.com, omondimargy@gmail.com

JEL: M10; M41; O14

Keywords: accounting information system, financial performance, accounting information recording, financial reporting

1. Introduction

The accounting information system is a framework used by commercial organizations to gather, organize, process, retrieve, and report their financial data for use by accountants, consultants, business analysts, managers, chief financial officers, auditors, regulators, and tax authorities (Gelinas, Dull, Wheeler, & Hill, 2017). Accounting information systems (AIS), which are a component of business information systems (IS), are thought to aid in decision-making inside firms and should be customized to the environment, task requirements, and organizational structure of the organization. Specifically, properly qualified accountants collaborate with AIS to guarantee the highest level of accuracy in a company's financial operations and recordkeeping and to make financial data easily accessible to those who need it while maintaining data integrity and security (Al-Okaily, Al-Okaily, Shiyyab, & Masadah, 2020).

A company's financial transactions and record-keeping are guaranteed to be as accurate as possible due to AIS, which also makes financial data conveniently accessible to those who genuinely need it while preserving data integrity and security. Any sugar manufacturing firms benefit from AIS since it ensures that safeguards are put in place to properly record and process data. This will help put an end to fraud cases. It also enhances workers' morale through an efficient payroll system (Setyaningsih, Mulyani, Akbar, & Farida, 2021). Most tea manufacturing firms have invested in accounting information systems in order to track transactions and improve their performance. These systems cost the firms millions of monies to acquire, install and maintain them in good condition (Rainer & Prince, 2022).

The use of accounting information systems (AIS) can improve the efficiency of the organization's accounting divisions. This facilitates information processing more quickly and more accurately, allowing businesses to better manage costs and improve internal and external financial reporting. Accounting systems are important in the tea manufacturing industry because they facilitate the flow of precise financial data and improve the efficiency of the entire accounting process, enabling decision-makers to make judgments in crucial areas such as expenditure, inflow, and pricing (Ali & Oudat, 2021).

Despite this heavy investment, these firms still make losses or experience declining profits. The 2015/2016 fiscal year generated a net profit of Ksh. 36, 867,654 for Kipchabo Tea Factory Limited. In the 2016–2017 fiscal year, this decreased to Ksh. 8, 105,703. This was a 78% decrease. 2015 had a profit after tax of Ksh. 2, 547 declared by Limuru Tea Company Limited. However, it reported a net loss of Ksh. 19, 074 in 2016 (Kenya Tea Board, 2020). The corporation may be required to lower its wage load through layoffs as a result of these losses. The farmers can also get paid late for their supplies. A decrease in the shareholders' return in the form of dividends is shown by the performance's decline. Additionally, the government loses a significant amount in taxes. The corporation may be required to lower its wage load through layoffs as a result of these losses (Hajra, 2021).

The majority of research done on Kenyan tea manufacturing companies to date has focused more on other factors like inventory management, financial controls, and internal controls on firms' performance. Less work has been done in Kenya, though, in terms of accounting information systems and financial performance. Therefore, it is necessary to assess how accounting information systems affect the financial performance of Kenyan tea production companies.

2. Objectives of the Study

2.1 General Objective

The general objective of the study was to examine the influence of accounting information system on the financial performance of tea manufacturing companies in Kenya.

2.2 Specific Objectives

1) To evaluate the effect of accounting information recording on the financial performance of tea manufacturing companies in Kenya.
2) To assess the effects of financial reporting on the financial performance of tea manufacturing companies in Kenya.

2.3 Research Hypothesis

1) Accounting information recording has no significant effect on the financial performance of tea manufacturing companies in Kenya.
2) Financial reporting has no significant effect on the financial performance of tea manufacturing companies in Kenya.

3. Literature Review

3.1 Theoretical Review

This section provides a discussion of key theories relating to accounting information systems.

3.2 Technology Acceptance Model

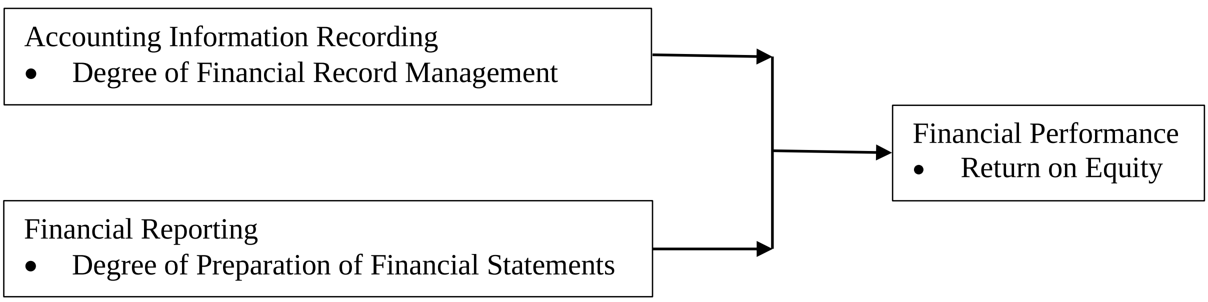
The Theory of Reasoned Action (TRA) was modified by (Davis, 1989) into the technological acceptance Model (TAM), which is designed primarily for simulating user adoption of information technology. The objective of TAM is to give a justification for the factors that determine whether or not people accept computers in general, and are able to rationally and sparingly explain user behavior across a wide range of end-user computing technologies and user groups. In a perfect world, a model would be useful for both explanation and prediction, allowing academics and practitioners to determine why a given system might be problematic and take the necessary corrective action (Marangunic & Granic, 2015). To trace the effect of external factors on internal beliefs, attitudes, and intentions is one of the main goals of TAM (Chen, Xu , & Arpan, 2017). In an effort to accomplish these goals, TAM was developed by selecting a small number of fundamental variables that had been suggested by earlier research on the cognitive and affective factors influencing computer acceptance, and by using TRA as a theoretical framework for modeling the theoretical relationships between these variables (Marangunic & Granic, 2015). The TAM model highlights broad aspects of prospective technology acceptance drivers and obstacles. It has been demonstrated to be a helpful theoretical model for explaining and understanding user behavior in the adoption of accounting information systems.

3.3 Conceptual Framework

Accounting information systems and financial performance are conceptualized in this section.

Independent Variables Accounting Information

Dependent Variable Systems Financial Performance



3.4 Empirical Literature Review

3.4.1 Accounting Information Recording and Financial Performance

Karigha (2022) aimed to investigate how accounting information systems affected the financial performance of small and medium-sized businesses in Kenya's Mombasa County. The purpose of the study was to determine how cash management, budget control, financial reporting, and record-keeping systems impacted the financial performance of small and medium-sized businesses. In this study, 1640 small and medium-sized businesses in Mombasa's central business district that have been in business for more than five years were the focus of a descriptive research design. Utilizing stratified random sampling, 268 managers and owners of small and medium-sized businesses were selected. Questionnaires were used to collect the data. Descriptive analysis and inferential statistics were used to analyze the data. The study's findings showed a significant relationship between small- and medium-sized business financial performance and record-keeping systems.

Ahmed and Schleich (2022) intended to investigate how accounting records affected Malaysia's small and medium enterprises' performance. The descriptive research design was used for the investigation. The target audience was made up of Johor Bahru, Malaysia-based SME entrepreneurs. There were 850 participants in the intended audience. Questions and answers were used as the data collection methods. According to the study's findings, accounting records are a reasonable explanation for performance and may account for 40.1% of fluctuations in SMEs' performance. Accounting records were discovered to be strongly and favorably connected to performance.

Somathilake and Ranathunga (2021) studied the effect of accounting record-keeping procedures affected the financial performance of SMEs in the Anuradhapura district. Data from 152 SMEs in the Anuradhapura district were gathered utilizing a structured interview process for the study, which was based on the quantitative research methodology. According to SPSS 25 version, descriptive analysis, correlation analysis, and multiple regression analysis were utilized to analyze the data that was gathered. Results showed that the financial performance of SMEs is positively impacted by accounting record-keeping methods and that financial statement preparation has a major impact on that performance.

Okpala (2019) studied how accounting records affected Nigeria's small and medium industries' financial performance. The study utilized survey research designs. Data were gathered using a survey, in which a questionnaire was sent to 176 participants who had been purposefully chosen from the population of particular small and medium-sized businesses. The study discovered that small and medium-sized businesses in the state of Anambra maintain accounting records of their financial activities. Additionally, Anambra State's small and medium-sized enterprises have performed much better because of that strong accounting system.

3.4.2 Financial Reporting and Financial Performance

Silalahi and Sinambela (2017) **s**tudied the factors that affect financial report accountability and how they affect the quality of financial report statements in the Indonesian province of North Sumatra. This study employed a descriptive methodology. In this study, the government of the province of North Sumatra served as the analytical unit, while 370 SKPD officials served as the unit of observation. Descriptive analysis and structural equation model (SEM) analysis are the two types of analysis that are used. According to research findings, the North Sumatra Province of Indonesia's financial reports were affected by the factors that determine financial reporting.

Crawford, Morgan and Cordery (2018) undertook empirical research to examine the global not-for-profit organization (NPO) financial reporting standards. The stud examined international practices and beliefs regarding NPO financial reporting, perceptions of accountability between NPOs and stakeholders, and implications for developing international financial reporting standards. Our analysis is based on a global survey of respondents who had experience with NPO reporting in 179 countries. When we interpret our research in the context of accountability, we discover strong support for the creation of international financial reporting standards for non-profit organizations, acknowledging the value of broad stewardship accountability to all stakeholders while giving external funders and regulators top priority.

Chalam & Ng'eni, 2017 aimed to assess how financial reporting can help local governments become more financially accountable. In the study, both primary and secondary data were employed. The majority of the CAG general reports were used to compile the secondary data. In order to gather primary data, structured questionnaires were sent to 28 different councils. The most frequent respondents were ward councilors, internal auditors, planning officers, procurement officers, council directors, and accountants. Both descriptive and inferential statistics were used in the study's data analysis. The study's conclusions indicate that financial reporting significantly and favorably affects Tanzanian local governments' ability to be financially accountable.

Agung, 2020 assessed the impact of financial reporting standards on the effectiveness of regional government accountability. The research design for the study was descriptive and verified. It was directed at those who worked for regional government agencies. The study made use of original information that was gathered through the use of closed-ended, structured questionnaires. Both factor and regression analysis were employed in the study's data analysis. The results of the study showed that the performance of the regional government's accountability has a favorable and significant impact on the quality of financial reporting.

3. Methodology

This section describes the research methods used in the study.

3.1 Research Design

The study adopted case study research design. A case study is a research method used to produce a thorough, multifaceted understanding of a complex subject in its actual setting. It is a well-known research strategy that is widely applied in a range of fields, particularly the social sciences (Pandey & Pandey, 2015). The design will be most appropriate since it will help the researcher to gain concrete, contextual and in-depth knowledge about accounting information systems and financial performance of Mudete Tea Factory.

3.2 Target Population

The study's target population consisted of 32 personnel at the Mudete Tea Factory, including 7 from the human resources department, 3 from the top management level, 9 from the procurement department, and 13 from the accounting and finance departments. Table 1 represents the target population of the study.

Table 1: Target Population

Category	**Numbers**
Management	3
Human resource	7
Procurement	9
Accounting and Finance	13
Total	32

3.3 Sampling Technique

This study employed the census-sampling methodology. Therefore, all the target population was used in collection of data. The method was chosen for this study because it offers more precise and reliable information because every unit is included, leading to conclusions that are impartial. A census is a compilation of data on every component of the population. A census ensures that complete demographic data is gathered accurately (Pandey & Pandey, 2015).

3.4 Data Collection Instruments

The questionnaire was intended to gather data regarding the respondents' perceptions of the effectiveness of accounting information systems on manufacturing enterprises on a scale of 1 to 5. The best way to get data is through using questionnaires since they guarantee respondents' privacy, allowing them to respond honestly and impartially. The use of 2017–2018 audited financial statements allowed for the collection of secondary data.

3.5 Pilot test

A pilot test was conducted in Kaimosi Tea Factory. The goal of the pilot test is to evaluate the study's data collection methods and protocol. It is a scaled-down form used to be ready for the core study. Piloting guards against potential snags and costly mistakes that will be recorded and fixed. It helps make any necessary changes to the survey test items as well as predict the amount of time needed for actual fieldwork.

3.6 Validity

The questionnaires' validity was examined using expert analysis. Validity assisted in determining whether the instrument measures what it was intended to. It included checking through the questionnaires to make sure they contain the necessary information.

3.7 Reliability Analysis

The degree to which a research instrument produces consistent results or data after repeated trials and is an accurate representation of the entire population under study is referred to as reliability. Cronbach's alpha was utilized in the study to gauge reliability (Cooper & Schindler, 2017). Its values varied from 0 to 1, with values between 0.8 and 1.00 indicating a significant level of dependability, values between 0.70 and 0.80

suggesting an acceptable level of reliability, and values below 0.70 being regarded as less dependable and undesirable. Reliability analysis results were used to decide whether or not the questionnaire needed to be rewritten.

3.8 Data Collection Procedure

Questionnaires were used to gather primary data. The researchers handed out the questionnaires in person. The questionnaires could be completed within a two-week window. After the allotted time had passed, the questionnaires were retrieved. The company's 2017–2018 audited financial statements were used to gather secondary data.

3.9 Data Processing, Analysis and Presentation

The collected information was cleaned, arranged, coded, and put through SPSS version 27. The study's diagnostic tests included the Shapiro-Wilk for normality test, the Durbin-Watson for autocorrelation test, the variance inflation factor for the multicollinearity test, and the Breusch-Pagan test for heteroscedasticity. Statistics were created using inferential methods. Multiple regression analysis and correlation analysis are both parts of inferential statistics. Tables were used to present the data. The degree of the relationship between the accounting information system and financial performance was determined using the regression model shown below.

$$Y = ß_0 + ß_1X_1 + ß_1X_2 + \varepsilon \qquad (3.1)$$

Where:
Y = Financial performance;
$ß_0$ = Constant;
$ß_1$ = Regression coefficients;
X_1 = Accounting information recording;
X_2 = Financial reporting;
ε = The error term.

4. Data Analysis, Results, and Discussions

The section includes a discussion of the study's findings.

4.1 Correlation Analysis

The correlation analysis was carried out to investigate the relationship between the study variables. The findings of the correlation study are shown in Table 2.

Table 2: Correlational Analysis

	X_1	X_2	Y^0
X_1	1		
X_2	0.276	1	
	(0.109)		
Y	0.611*	0.618*	1
	(0.019)	(0.000)	

Source: Study data.

Table 2 above shows the correlational results between independent and dependent variables. The findings indicated that accounting information recording (X_1) has a positive and significant association with the financial performance of tea manufacturing companies in Kenya (r=.611, p=0.019). As a result, in order to ensure their company's financial performance is effective, the managers of diverse tea enterprises must adopt proper bookkeeping records procedures. The results also indicated that financial reporting (X_2) through accounting information systems has a positive and significant effect on the financial performance of tea firms in Kenya (r=.618, p=.000). Therefore, in order for firms to have efficient financial performance they should do their financial reporting through accounting information system.

4.2 Model Summary[b]

The strength of the association between the model variables and the dependent variable is reported in the model summary. The dependent variable's projected values and the observed model's predicted values are linearly correlated, as shown by the multiple correlation coefficient R. The coefficient of determination (R square) shows the variability in the independent and dependent variables as shown in Table 3.

Table 3: Model Fit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.714[a]	.508	.509	.419

Source: Study data.

The R-value of 0.714 in Table 3 indicates a significant connection between the independent and dependent variables. The accounting information systems are responsible for 50.8% of the variation in financial performance, according to the R square value of 0.508. The other components not included in the model are responsible for the remaining 49.2% of variances in financial performance. The percentage estimate of this explainable dispersion for the entire population under consideration, according to R square adjusted data, is 50.9%.

4.3 ANOVA

Table 4 shows the connection between the elements of the accounting information system and the financial performance of Kenyan tea companies. At a 95% confidence level and a p-value of $0.007<0.05$, the entire model demonstrates that accounting information systems strongly influence financial performance.

Table 4: Anova

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.765	4	0.4187	4.812	.007[b]
	Residual	11.511	120	0.0883		
	Total	12.381	124			

a. Predictors: (Constant), X_1, X_2
b. Dependent Variable: Financial Performance

4.4 Regression Analysis

The discussion of the regression results followed the objectives of the study. Table 5 shows the results of the regression analysis of the study.

Table 5: Regression Model

Model		Unstandardized Coefficients		T	Sig.
		B	Std. Error		
	(Constant)	6.125	3.15	1.944	.000
	X_1	.223	.070	3.186	.019
	X_2	.257	.091	2.824	.016

Source: Study data.

The regression equation of the study is:

$$Y = 6.125 + 0.223X_1 + 0.257X_2$$

From the regression model equation, the constant 6.125 shows that if the accounting information system, is not implemented, the financial performance of tea firms will be measured on net profit margin would be 6.125. The first objective of the study was to determine how accounting information recording affected the financial performance of tea manufacturing companies. This goal was based on the null hypothesis that there is no significant effect between accounting information recording and financial performance. Given that the p-value for the regression analysis in Table 5 was less than 0.05 and the regression coefficient was 0.223, it can be concluded that accounting information recording has a significant impact on financial performance in Kenyan tea manufacturing companies. The null hypothesis of the study was thus rejected, showing that a percentage increase in accounting information recording enhances financial performance. The second objective of the study was to ascertain the effect of financial reporting on financial performance in tea manufacturing firms and was based on the null hypothesis that financial reporting has no significant effect on financial performance. The regression analysis shown in Table 5 had a regression coefficient of 0.257 with a p-value of 0.016, which indicates that there is a significant effect of financial reporting on financial performance in the tea manufacturing firms in Kenya since the p-value of 0.016 was less than 0.05. Therefore, the study's null hypothesis was rejected, indicating that a percentage increase in financial reporting improves financial performance of tea firms in Kenya.

5. Conclusions and Recommendations

The study's conclusions and recommendations are presented in this chapter.

5.1 Conclusions

According to the study's findings, Kenyan tea companies' financial performance is positively impacted by the recording of accounting information. Poor financial performance will result from inaccurate accounting information recording, while a company's financial performance will be significantly improved by accurate accounting information recording. In addition, the study concluded that financial reporting positively influences the financial performance of tea firms in Kenya. Therefore, proper financial reporting will lead to the improved financial performance of tea manufacturing firms in Kenya.

5.2 Recommendations

The research recommended that tea manufacturing firms should ensure they use accounting information systems in their daily activities which results in improved financial performance. The study also recommends that the company management should ensure proper accounting information recording by ensuring that specific organization documents are recorded well since they are vital for decision-making. This can be ensured by starting program training concerning records keeping and using educated and skilled employees. The tea firms' managers must embrace appropriate financial reporting techniques for them to attain success in their financial performance. The firms should ensure that the company reports are prepared as per the guidelines from the firm's organization policies.

Conflict of Interest Statement
The authors declare no conflicts of interest.

About the Authors
Patrick Malongo Lidovolo is a student at Kaimosi Friends University studying a Doctorate in Business Management (Accounting Option).
Dr. Margaret Atieno is a Lecturer and Head of Accounting Department at Kaimosi Friends University with diverse research interests in the field of Accounting and Finance.

References

Agung, M. (2020). The effect of financial reporting quality on regional governments' performance accountability. *KnE Social Sciences*, 694-701.

Ahmed, M., & Schleich, A. (2022). Influence of Accounting Records on Performance of Small and Medium Enterprises in Malaysia. *Journal of Finance and Accounting*, 6(2), 11-21.

Ali, B., & Oudat, M. (2021). Accounting Information System and Financial Sustainability of Commercial and Islamic Banks: A Review of The Literature. *Journal of Management Information & Decision Sciences*, 24(5).

Al-Okaily, A., Al-Okaily, M., Shiyyab, F., & Masadah, W. (2020). Accounting information system effectiveness from an organizational perspective. *Management Science Letters*, 10(16), 3991-4000.

Chalam, G. V., & Ng'eni, F. B. (2017). Financial accountability and financial reporting in a decentralized environment (a case study of Tanzanian Local Government Authorities). *International Journal of Management*, 8(3), 14-31.

Chen, C., Xu, X., & Arpan, L. (2017). Between the technology acceptance model and sustainable energy technology acceptance model: Investigating smart meter acceptance in the United States. *Energy research & social science*, 25, 93-104.

Cooper, D., & Schindler, R. (2017). *Social Sciences Research Methods.* London: Mc Grow Hill Publishers.

Crawford, L., Morgan, G. G., & Cordery, C. (2018). Accountability and not-for-profit organisations: Implications for developing international financial reporting standards. *Financial accountability & management*, 34(2), 181-205.

Davis, F. (1989). Technology acceptance model: TAM. *Information Seeking Behavior and Technology Adoption*, 205-219.

Fiedler, F. (1967). *A Theory of Leadership Effectiveness.* McGraw: McGraw-Hill Series in Management.

Gelinas, U., Dull, R., Wheeler, P., & Hill, M. (2017). *Accounting information systems.* Cengage learning.

Hajra, C. (2021). Indian Tea: Robust Growth Amid Rising Challenges. *Journal of Tea Science Research*, 11.

Karigha, F. (2022). *Accounting Information Systems and Financial Performance of Small and Medium Enterprises in Mombasa County, Kenya.* Nairobi: Repository of K.U.

Kenya Tea Board. (2020). *Realizing Tea Promise.* Nairobi: Kenya Tea Board.

Marangunic, N., & Granic, A. (2015). Technology acceptance model: a literature review from 1986 to 2013. *Universal access in the information society*, 14, 81-95.

McAdam, R., Miller, K., & McSorley, C. (2019). Towards a contingency theory perspective of quality management in enabling strategic alignment. *International Journal of Production Economics*, 207, 195-209.

Okpala, L. I. (2019). Effect of Accounting Records on Financial Performance of Small and Medium Industries in Nigeria. *International Journal of Trend in Scientific Research and Development,* 1120-1129.

Pandey, P. D., & Pandey, M. D. (2015). *Research Methodology: Tools & Techniques.* Romania: Bridge Center.

Rahimi, B., Nadri, H., Afshar, H., & Timpka, T. (2018). A systematic review of the technology acceptance model in health informatics. *Applied clinical informatics*, 9(03), 604-634.

Rainer, R., & Prince, B. (2022). Introduction to information systems: Supporting and transforming business. *John Wiley & Sons*.

Setyaningsih, S., Mulyani, S., Akbar, B., & Farida, I. (2021). Quality and efficiency of accounting information systems. (2), 323-337.

Silalahi, T., & Sinambela, S. (2017). Determinants of Financial Report Accountability, and it's Implication on Financial Report Quality an Empirical Study of Financial Report Statement in North Sumatra Province, Indonesia. *International Journal of Economics, Commerce and Management*, 159-172.

Somathilake, H., & Ranathunga, K. (2021). The Effect of Accounting Record Keeping Practices on Financial Performance: Special Reference to Small and Medium Enterprises in Anuradhapura District. *International Journal of Research and Innovation in Social Science*, 258-267.